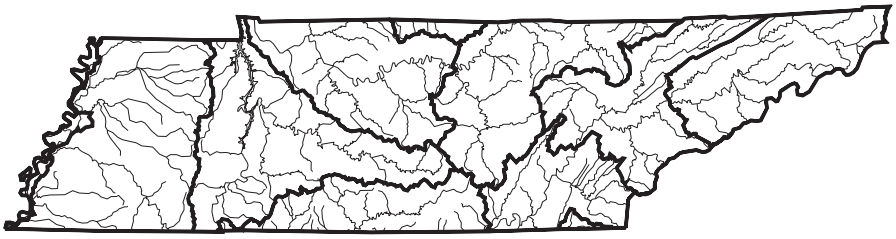
Tennessee



Basin Boundaries
(USGS 6-Digit Hydrologic Unit)

For a copy of the Tennessee 1996 305(b) report, contact:

Greg Denton
Tennessee Department of
Environment and Conservation
Division of Water Pollution Control
401 Church Street, L&C Annex
Nashville, TN 37243-1534
(615) 532-0699
e-mail: gdenton@mail.state.tn.us

Surface Water Quality

Seventy-three percent of surveyed rivers and streams fully support aquatic life uses and 27% are not supporting these uses due to severe pollution. Conventional pollutants (such as siltation, suspended solids, nutrients, and oxygen-depleting substances) affect the most river miles. Toxic materials, bacteria, and flow alterations impact rivers to a lesser extent. Major sources of pollutants include agriculture, hydromodification, and municipal point sources. Intense impacts from mining occur in the Cumberland Plateau region, and poor quality water discharged from dams impacts streams in east and middle Tennessee.

In lakes, 496,340 acres (92%) fully support aquatic life uses and 42,390 acres (8%) do not support these uses due to severe pollution. The most widespread problems in lakes include nutrients, low dissolved oxygen, metals, flow alteration, and priority organics. Major sources of these pollutants are stream impoundments, contaminated sediments, urban runoff/storm sewers, land treatment, and spills.

Swimming and wading are restricted in Chattanooga Creek and East Fork Poplar Creek due to toxic contamination from discontinued waste disposal practices and elevated levels of fecal coliform bacteria.

Ground Water Quality

Ground water quality is generally good, but pollutants contaminate (or are thought to contaminate) the resource in localized areas. These pollutants include, but are not limited to, volatile and semivolatile organic chemicals, bacteria, metals, petroleum products, pesticides, and radioactive materials.

Programs to Restore Water Quality

The Division of Water Pollution Control has adopted a watershed

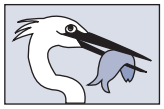
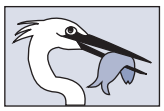
approach to improving water quality and encouraging coordination with the public and other agencies. Each of the 54 watersheds will be managed on a 5-year cycle coinciding with the duration of discharge permits. Tennessee is also conducting several Total Maximum Daily Load studies that use a watershed approach to allocate maximum pollutant loading among all the point sources discharging into a stream or its tributaries.

Programs to Assess Water Quality

Tennessee's ambient monitoring network consists of 156 active stations sampled quarterly for conventional pollutants (such as dissolved oxygen, bacteria, and suspended solids), nutrients, and selected metals. The State also performs intensive surveys at streams where State personnel suspect that human activities are degrading stream quality. Intensive surveys often include biological monitoring. The State samples toxic chemicals in fish and sediment at sites with suspected toxicity problems.

With assistance from EPA, Tennessee has undertaken to subdelineate ecoregions and to characterize water quality at carefully selected reference streams. Data from this project will help the Division set clean water goals on a regional, rather than statewide, basis.

Individual Use Support in Tennessee

Designated Use[a]		Percent				
		Good (Fully Supporting)	Good (Threatened)	Fair (Partially Supporting)	Poor (Not Supporting)	Poor (Not Attainable)
Rivers and Streams (Total Miles = 61,103)[b]						
	Total Miles Surveyed	73			27	
	61,103		-	-		-
		>99				
	61,103		-	-	<1	-
		92				
	61,103		-	-	8	-
Lakes (Total Acres = 538,730)						
	Total Acres Surveyed	92			8	
	538,730		-	-		-
		85				
	538,730		-	3	12	-
		83				
	538,730		-	-	17	-

– Not reported in a quantifiable format or unknown.

[a] A subset of Tennessee's designated uses appear in this figure. Refer to the State's 305(b) report for a full description of the State's uses.

[b] Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.